

CLAIMS

1-17. (Cancelled)

18. (currently amended) A method for obtaining extracted DNA from gum samples comprising one or more of guar gum (E 412) and locust bean gum (E 410), comprising the steps of:

- i) contacting a gum sample comprising DNA and one or more of guar gum (E 412) and locust bean gum (E 410) with an aqueous solution to form an extraction mixture;
- ii) agitating the extraction mixture at a temperature between 0°C and 100°C for a time period sufficient to permit extraction of DNA from the gum sample into the aqueous solution;
- iii) separating the extraction mixture to obtain an aqueous solution containing extracted DNA and another phase; and
- iv) recovering a sample of the aqueous solution containing extracted DNA; and
- v) using PCR to amplify the extracted DNA using one or more primers having a sequence of SEQ ID NO:4, SEQ

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ID NO:6, a portion of SEQ ID NO:7 or a portion of SEQ ID NO:9.

19. (previously presented) The method according to claim 18 wherein said aqueous solution is a buffered aqueous solution.

20. (previously presented) The method according to claim 18 wherein said aqueous solution further comprises acetonitrile or ethanol.

21. (previously presented) The method according to claim 18 wherein the extraction mixture is agitated at room temperature.

22. (previously presented) The method according to claim 18 wherein the extraction mixture is separated by decantation.

23. (previously presented) The method according to claim 18 wherein the extraction mixture is separated by centrifugation.

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24. (previously presented) The method according to
claim 23 wherein the centrifugation is at 15,000 x g.

25-26. (cancelled)